

CASE #: FY87-1725

**SITE ASSESSMENT AND SAMPLING MISSION**

**AT**

**~~GRANT ROAD DRUM SITE~~**

**7X15982303195**  
**HOUSTON, HARRIS COUNTY, TEXAS**

**Prepared for**

**EPA REGION VI**

**EMERGENCY RESPONSE BRANCH**

**J. Chris Petersen**  
**Deputy Project Officer**

**By**

**ECOLOGY AND ENVIRONMENT, INC.**

**TECHNICAL ASSISTANCE TEAM**

**HOUSTON, TEXAS**

**DATE: 9/10/87**

**PRELIMINARY REPORT**  
**This does not constitute**  
**final opinion of EPA.**



# ecology and environment, inc.

6440 HILLCROFT AVENUE, HOUSTON, TEXAS 77081, TEL. 713/771-9460

International Specialists in the Environment

DATE: September 10, 1987

TO: James Staves, OSC  
EPA Region VI, Emergency Response Branch

THRU: J. Chris Petersen, Deputy Project Officer  
EPA Region VI, Emergency Response Branch

THRU: William Goode, TAT Leader  
Region VI, Technical Assistance Team - Dallas

FROM: Richard Yeager, TAT Member *RNY*  
Region VI, Technical Assistance Team - Houston

SUBJECT: Site Assessment and Sampling Mission  
Grant Road Site  
Houston, Harris County, Texas *TLD*

TDD #: T06-8706-37  
PAN #: TTX 0587 SAA  
CASE #: FY87-1725 *982 305195*

On June 25, 1987, TAT members Yeager and McLaughlin investigated a report by a citizen concerning abandoned drums in the north part of Houston. The abandoned drums are located on a wooded tract of land to the east of the Warner Cable hub station at 9602 Grant Road, Harris County, Houston. The purpose of TAT's visit was to perform reconnaissance at the site and to determine if an immediate and substantial threat to the public health or the environment exists at the site. When TAT arrived on site, Warner Cable personnel were also present. Warner Cable showed TAT the location of the drums. One of the Warner Cable personnel stated that he believed the lot to the east of Warner Cable's property had once been a "fertilizer or pesticide place." Subsequently, TAT investigated the area. Approximately 50 fifty-five gallon steel drums were located to the north of an east-west barbed-wire fence. Most of the drums were upright, and some were still on pallets. Most were so badly rusted that the labels on them could not be read. Some of the drums were clearly marked "Anhydrous Aluminum Chloride." None of the drums appeared to be leaking; however, some appeared to be bulging. There was no stressed vegetation in the area around the drums. There was little evidence of human traffic around the drum area, although what appeared to be a child's "fort" was located about 300 feet to the south of the drum area. A strip mall is located approximately 200 feet to the east of the drums, and a child daycare center is located one quarter mile to the southeast. Access to the drums is not restricted. TAT left the site and reported site conditions to OSC Hammack.

On June 26, 1987, TAT member McLaughlin placed a telephone call to Jerry Spetseris, a Field Investigator for the Texas Water Commission TWC. Mr. Spetseris stated that he found about ten drums in mid-May, but did not know about the 50 drums along the barbed-wire fence. He also stated that he and a potential lessor of the property opened one of the drums labeled "Anhydrous Aluminum Chloride" and found "paint wastes." He also informed TAT that the property management firm which handles the property is Raymond R. Betz Company.

TAT member McLaughlin subsequently phoned Raymond R. Betz Company and spoke with Joanne Schnell. She stated that the property which contains the drums was purchased by a group of investors in 1982 and managed by Raymond R. Betz Company. She also stated that she had no idea what the drums contained. She was in the process of receiving bids for the removal of the drums.

On June 29, 1987, TAT members Yeager, McLaughlin and Fry travelled to the site in order to obtain soil samples from the drum area. TAT was accompanied to the site by OSC James Staves. TAT also met with TWC Field Investigator Spetseris at the site. In order to maneuver in the vicinity of the drums, Spetseris cleared brush near the drums. Spetseris also showed TAT 11 additional drums located to the north of the main group of drums. TAT dressed in Safety Level B and conducted air monitoring with the OVA. No readings above background were observed. Draeger tubes which detect hydrogen chloride were also used to determine if the gas was evolving from drums marked aluminum chloride. None was detected. TAT then downgraded to Safety Level C and obtained four soil samples from selected areas near the drums. During the investigation, TAT accurately counted the number of drums on the site. Sixty 55-gallon steel drums were counted; forty-nine were located along the east-west fence line, and eleven were scattered in the wooded area to the north. Thirteen of the drums were clearly marked as "Anhydrous Aluminum Chloride." A few drums were marked as atomized aluminum. Some of the bands which held the drums together on the pallets were still in place. After collecting the soil samples (see site sketch for sampling locations), TAT left the site. The samples were taken to the EPA Laboratory in Houston to be analyzed for priority pollutants.

#### **Summary of Laboratory Results**

Four soil grab samples were obtained in the vicinity of the drums. The samples were analyzed for priority pollutants (Hazardous Substance List metals and cyanide, ABN's, VOAs, pesticides, and herbicides.) No VOAs, pesticides, or herbicides were detected in any of the samples.

Of the four samples taken, only Sample #4 showed significantly elevated levels (greater than 3 times the western U.S. ambient background) of several metals.

<u>Sample #4</u>	<u>Conc. (mg/kg)</u>	<u>Ambient Background Western US (mg/kg)</u>
Lead	413	17
Mercury	2.86	0.046
Zinc	261.8	70

Cyanide concentrations in the samples were:

<u>Sample #</u>	<u>CN (mg/kg)</u>
1	0.05 (less than detection limit)
2	0.13
3	0.51
4	0.17

ABN analysis in Sample #1 revealed a bis(2 ethylhexyl)phthalate concentration of 15,000 ug/kg. Sample #3 showed an estimated concentration of 4440 ug/kg of an unknown compound. Sample #4 showed the following tentatively identified concentrations: gamma-chlordane, 873 ug/kg; unknown chlorinated hydrocarbon, 590 ug/kg; unknown chlorinated hydrocarbon, 354 ug/kg; and an unknown compound, 3450 ug/kg.

### Conclusions

ABN analysis is inconclusive. Bis(2 ethylhexyl)phthalate is a common laboratory contaminant. Tentatively identified concentrations of gamma-chlordane and chlorinated hydrocarbons were not confirmed in the pesticide analysis. Sample #3 showed a cyanide concentration approximately ten times the detection limit. Metal analysis showed elevated concentrations of lead, mercury, and zinc.

The elevated concentrations of lead, mercury, and zinc in the soil indicate that further investigation into the contents of the drums is warranted. The proximity of the shopping mall and unrestricted access to the site pose the possibility of human or animal contact. TAT recommends that (1) the contents of the drums be sampled and/or (2) the PRP's should be strongly urged to properly dispose of the drums. Research into the previous ownership of the site may also be helpful in determining the contents of the drums.

List of Attachments: TDD No. T06-8706-37

Trip Narrative

Topographic Map

Site Sketch

Photographs and Negatives

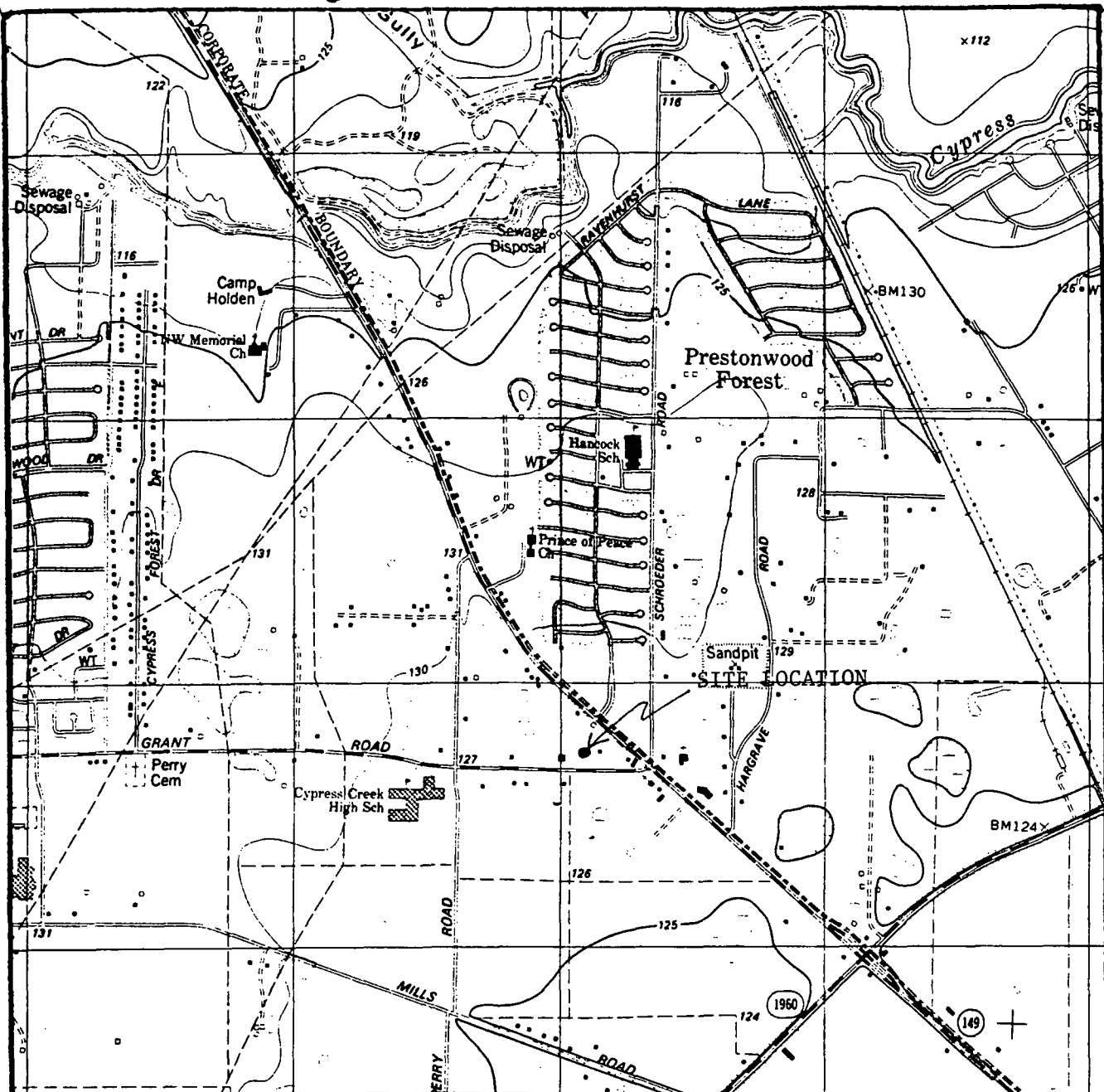
Logbook Copies

Phone Conversation Records

EPA Laboratory Analysis

Copy of TDD No. T06-8706-37

Copy of AOC/POR



**Ecology and Environment, Inc.**  
**Technical Assistance Team**  
**Region VI**

**Case No:** FY87-1725

**TDD No:** 06-8706-37

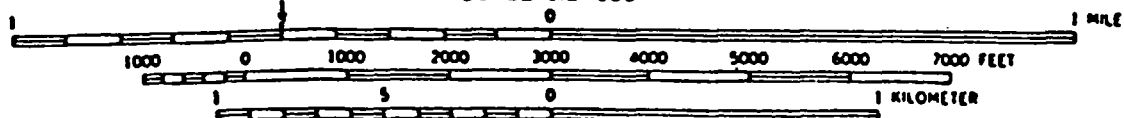
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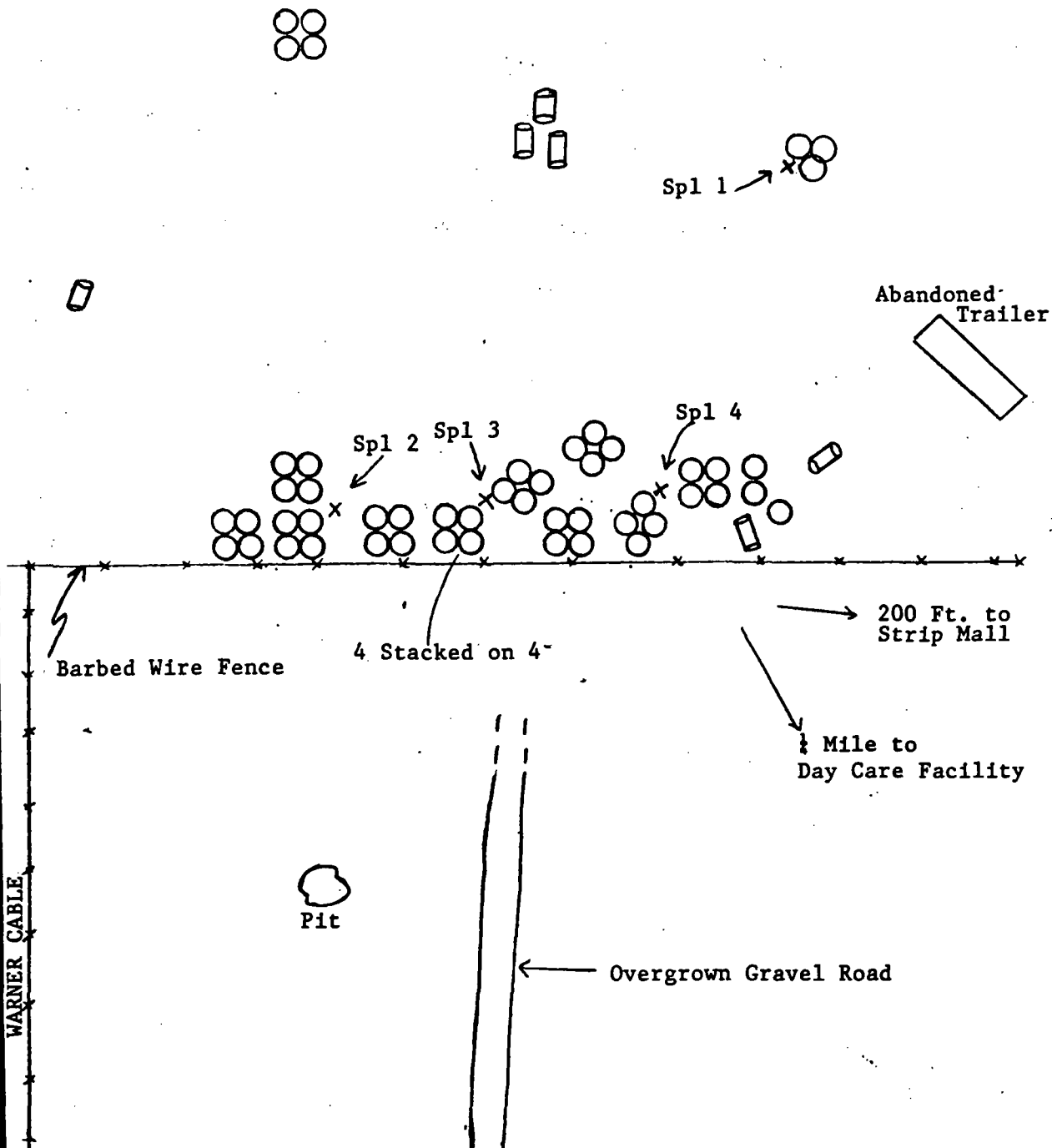
**Date:** 6/30/87

**Originator:** Richard Yeager

LOCATION OF GRANT ROAD SITE  
 SATSUMA QUADRANGLE  
 TEXAS-HARRIS CO.  
 7.5 MINUTE SERIES (TOPOGRAPHIC)  
 NE/4 ADDICKS 15' QUADRANGLE

**SCALE 1:24000**





GRANT ROAD



Ecology and Environment, Inc.  
Technical Assistance Team  
Region VI

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PAN: TTX 0587 SAA

Date: 6/30/87

Originator:

Richard Yeager



Page 2 of 4

TDD#: T06-8709-17

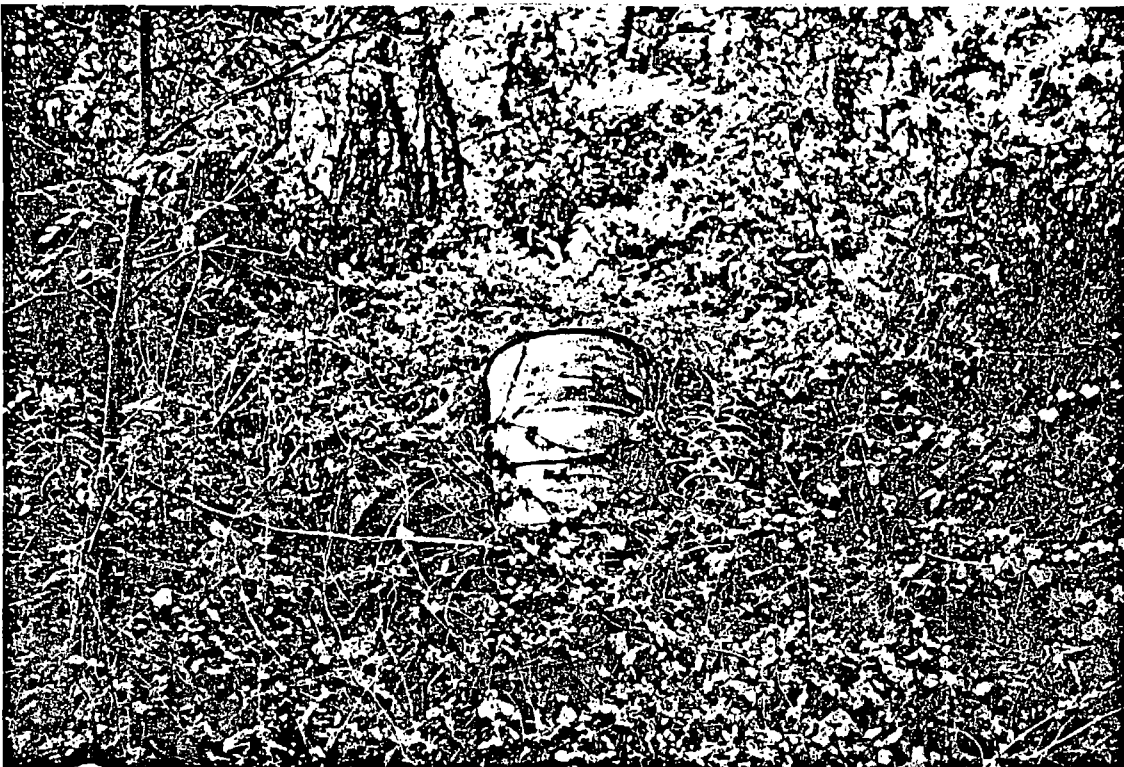
Photographer / Witness

Marquccio/ Yeager, Hardin, Donohue

Date / Time / Direction

9/22/87 0930 West

Comments: TAT investigating four drums  
which showed significant deterioration.



Photographer / Witness

Marquccio/ Yeager, Hardin, Donohue

Date / Time / Direction

9/22/87 0932 South

Comments: View of an aggregate of four  
drums overgrown by vegetation.





Page 3 of 4

TDD#: T06-8709-17

**Photographer / Witness**

Marguccio/ Yeager, Hardin, Donohue

**Date / Time / Direction**

9/22/87 0935 West

**Comments:** TAT performing air monitoring  
on lone drum.



**Photographer / Witness**

Staves/ Ryan

**Date / Time / Direction**

9/22/87 South

**Comments:** TAT conducting drum sampling of  
open containers.



Page 4 of 4

TDD#: I06-8709-17

Photographer / Witness

Staves/ Ryan

Date / Time / Direction

9/22/87 South

Comments: TAT conducting sampling of drums  
and clearing vegetation from around drums.



Photographer / Witness

Staves/ Ryan

Date / Time / Direction

9/22/87 South

Comments: TAT conducting sampling and  
labelling of drums.

GRANT ROAD DRUM SITE ————— TUESDAY 9-22-87  
 MARGUCCIO, HARDIN, DONOHUE AND YEAGER IN HOUSTON TAT VEHICLE  
 DEPARTED HOTEL 0720 ARRIVED SITE 0800. 0805 (CONVICTED)

SAFETY MEETING, DISCUSSED OBJECTIVES WITH OSC, SET-UP  
 FOR SITE ENTRY. OVA BACKGROUND 1.6 ppm. ENTRY 0915.  
 RAD BACKGROUND 0.8 INITIAL ENTRY AROUND DRUMS  
 NO EXPLOSIVE READINGS, ONE GREY DRUM WITH OPEN  
 BUNG READ 25 ppm 2 CONTAINERS OPEN. TAT  
 CLEANSING BRUSH. DRUMS TO NORTH, ONE OPEN  
 RUSTED OVA - 15 ppm. ONE BLACK CYLINDER INITIALLY  
 FOUND 9 DRUMS TO NORTH. ENTRY COMPLETED 0940.

2<sup>ND</sup> ENTRY STARTED 1008 SAMPLE GRO1 TAKEN J. HARDIN  
 1012. ~~GR2~~ GRO2 1020 RES SOLID. ~~GR2~~ *GR2*  
 OVA ON GRO1 DRUM AFTER ~~GR2~~ SAMPLE  
 TAKEN 1000 ppm. WALKED TO DRUMS TO NORTH.

OPEN TOP DRUM GRO31 FOR LIQUID PHASE TAKEN  
 1030. GRO35 FOR SOLID PHASE - GRN TO BRICK RED  
 SLUDGE, TAKEN 1033. OFF AIR AT END OF ENTRY  
 1038. DRO SAMPLES AND EQUIPMENT. BREAK

DECON SAMPLES AND EQUIPMENT. REFILLED TANKS OF AIR.  
 COMPLETED CHAIN OF CUSTODY AND SAMPLE INFO. SEALED  
 COOLED FOR DELIVERY TO HOUSTON LAB 1146. DROVE TO  
 HOUSTON LAB, ARRIVED 1355 HOURS, DELIVERED SAMPLES. DISCUSSED  
 TURNAROUND TIME FOR ANALYSIS. SETTED ON 30 DAYS, UNLESS  
 OX CONTACTS LAB TO CHANGE. RETURNED TO HOUSTON TAT  
 OFFICE. RETURNED LARGE AIR CYLINDERS (2) AND PICKED UP  
 TWO MORE FOR TOMORROW'S ASSESSMENT. PROCEEDED TO HOTEL.

**PHONE CONVERSATION RECORD**

Conversation with:

Name JIM STAVES, OSCCompany EPA

Address \_\_\_\_\_

Phone \_\_\_\_\_

Subject GRANT ROAD SITE ASSESSMENTDate 10 / 28 / 87Time 1600 AM/PM☐ Originator Placed Call☒ Originator Received Call

Notes: STAVES RETURNED CALL OF ORIGINATOR. OSC HAS RECEIVED  
DATA FROM DRUM SAMPLING. TATM REQUESTED AN EXTENSION /  
AMENDMENT OF TDD UNTIL WEEK OF NOVEMBER 16 - 20, TO  
COMPLETE REPORT. TAT WILL USE ACTION MEMO FORMAT FOR  
FORMAL REPORT. TAT WILL SUBMIT AMENDED TDD.

☐ File \_\_\_\_\_☐ Tickle File \_\_\_\_\_ / \_\_\_\_\_ / \_\_\_\_\_☐ Follow-Up By: \_\_\_\_\_☐ Copy/Route To: \_\_\_\_\_

Follow-Up-Action: \_\_\_\_\_

Originator's Initials BM

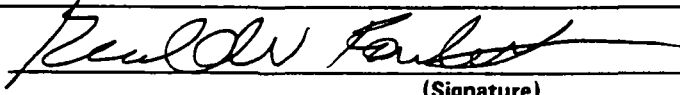
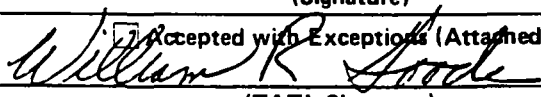
PROJ. NO.		PROJECT NAME						NO. OF CON- TAINERS		REMARKS							
7FA-K		GRANT ROAD DRUM SITE															
		TXD982305195															
SAMPLERS: (Signature)																	
STA. NO.	DATE	TIME	COMP.	GRAB	STATION LOCATION												
SR001	9/22/87	1012		X	DRUM SR001			1	X	TAG NO. 6-22345							
SR002	9/22/87	1020		X	DRUM SR002			1	X	" " 6-22346							
SR003	9/22/87	1030		X	DRUM SR003 LIQUID PHASE			1	X	" " 6-22347							
SR005	9/22/87	1033		X	DRUM SR005 SOLID PHASE			1	X	" " 6-22348							

Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)	
Richard M. George		9-27-87 1256									
Relinquished by: (Signature)		Date / Time		Received by: (Signature)		Relinquished by: (Signature)		Date / Time		Received by: (Signature)	
Relinquished by: (Signature)		Date / Time		Received for Laboratory by:		Date / Time		Remarks			
				(Signature) Arthur Carter		9/22/87 14:00					

Distribution: Original Accompanies Shipment; Copy to Coordinator Field Files

**Distribution: Original Accompanies Shipment; Copy, to Coordinator Field Files**

6-7074

1A. Cost Center: TS1306		<b>TAT ZONE II CONTRACT</b> CONTRACT NO. 68-01-7368 <b>TECHNICAL DIRECTION DOCUMENT (TDD)</b> ECOLOGY AND ENVIRONMENT, INC.		2. No.: T 06-8709-17 TXD982305195  Amendment <u>A</u>					
1B. Account No.: TTX0507SAC									
3A. Priority <input checked="" type="checkbox"/> High <input type="checkbox"/> Medium <input type="checkbox"/> Low		4A. Estimate of Total Hours: <div style="background-color: black; color: red; font-size: 2em; text-align: center; padding: 5px;">(b) (4)</div>		5A. EPA Site Name: Grant Rd. Drum Site					
		5B. SSID No.: N/A		5C. City/County/State: Houston/Harris/TX					
3B. Key EPA Contact: Name: Staves Phone: 655-2270		4B. Overtime Approved: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		6. Source of Funds: <input type="checkbox"/> Other _____ <input checked="" type="checkbox"/> CERCLA <input type="checkbox"/> 311 <input type="checkbox"/> UST					
				7. Completion Date: 11/27/87					
				8. Reference Info: <input type="checkbox"/> Yes <input type="checkbox"/> Attached <input checked="" type="checkbox"/> No <input type="checkbox"/> Pick-up					
				8A. Subtask Code:					
9. Type of Activity: <table style="width:100%; border: none;"> <tr> <td style="width:33%; vertical-align: top;"> <u>CWA-311</u>  <input type="checkbox"/> SPCC  <input type="checkbox"/> On-Scene Monitoring  <input type="checkbox"/> Spill Clean-up Funded         </td> <td style="width:33%; vertical-align: top;"> <u>CERCLA</u>  <input checked="" type="checkbox"/> Site Assessment  <input type="checkbox"/> Removal Funded  <input type="checkbox"/> Removal PRP (AO/CO)  <input type="checkbox"/> On-Site Monitoring         </td> <td style="width:33%; vertical-align: top;"> <u>AS SPECIFIED ABOVE</u>  <input type="checkbox"/> Special Project  <input type="checkbox"/> Analytical Project  <input type="checkbox"/> TITLE III  <input type="checkbox"/> UST  <input type="checkbox"/> FEMA         </td> <td style="width:33%; vertical-align: top;"> <input type="checkbox"/> Quality Assurance  <input type="checkbox"/> Training  <input type="checkbox"/> Program Management  <input type="checkbox"/> Technical Assistance  <input type="checkbox"/> Information Management         </td> </tr> </table>						<u>CWA-311</u> <input type="checkbox"/> SPCC <input type="checkbox"/> On-Scene Monitoring <input type="checkbox"/> Spill Clean-up Funded	<u>CERCLA</u> <input checked="" type="checkbox"/> Site Assessment <input type="checkbox"/> Removal Funded <input type="checkbox"/> Removal PRP (AO/CO) <input type="checkbox"/> On-Site Monitoring	<u>AS SPECIFIED ABOVE</u> <input type="checkbox"/> Special Project <input type="checkbox"/> Analytical Project <input type="checkbox"/> TITLE III <input type="checkbox"/> UST <input type="checkbox"/> FEMA	<input type="checkbox"/> Quality Assurance <input type="checkbox"/> Training <input type="checkbox"/> Program Management <input type="checkbox"/> Technical Assistance <input type="checkbox"/> Information Management
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10. General Task Description: <u>Perform site assessment to determine removal potential</u>				11. Desired Report Form: <input checked="" type="checkbox"/> Formal Report <input type="checkbox"/> Letter Report <input type="checkbox"/> Formal Briefing <input type="checkbox"/> Other (Specify) _____					
12. Specific Elements: <u>TDD Amended to extend completion date, and change in scope.</u>  Original TDD Specific Elements: 1) Follow established guidelines during all phases of site assessment 2) Review previous undelivered TAT report 3) Open and test all drums using the "HAZ CAT" methodology 4) Compile samples from drums with similar characteristics into five (5) composite samples for priority pollutant analyses, transport samples to EPA Houston Lab. 5) Perform other duties as assigned by OSC  Amended elements: 1) "HAZ CAT" deleted from task 2) Obtain four (4) grab samples from open containers and transport samples to EPA Houston Lab. 3) Develop and present elements for draft Action Memo with formal report.				13. Interim Deadlines: <u>N/A</u>					
14. Authorizing DPO:  (Signature)				15. Date: <u>11/19/87</u>					
16. Received by: <input checked="" type="checkbox"/> Accepted  (TATL Signature)				17. Date: <u>11-23-87</u>					

## Distribution:

Sheet 1 White	DPO Copy
Sheet 2 Blue	TATL Copy
Sheet 3 Green	ZPM Copy
Sheet 4 Canary	PO Copy
Sheet 5 Pink	CO Copy
Sheet 6 Goldenrod	DPO Original (Unsigned by TATL)

T0070:

*B. Marquaccio*